

Serial No. 10/694,407

Attorney Docket No. 01-495

LISTING OF CLAIMS:

1. (Currently amended) A reproduction system comprising:

a storing unit for storing a plurality of pieces of information that can be reproduced;

a reproducing unit for reproducing a piece of information designated from the plurality of pieces of information stored in the storing unit;

a speech ~~recognizing~~-recognition unit for ~~inputting~~receiving a speech, which is inputted by a user, and for ~~recognizing and~~ decomposing the inputted speech into words to thereby recognize the words as a recognition result; and

a control unit for designating a search word from the recognized words sent by the speech ~~recognizing~~-recognition unit, retrieving a piece of information that corresponds to the search word from the stored pieces of information, and controlling the reproducing unit for reproducing the retrieved piece of information,

wherein, when the control unit retrieves a given group of pieces of information that corresponds to the search word, wherein the given group of pieces of information is a subset of the plurality of pieces of information, the control unit designates a given one from the given group of pieces of information without receiving any input from the user for designating one of the given group of pieces of information, to thereby instantaneously control the reproducing unit for reproducing the given one ~~of~~ designated from the given group.

2. (Currently amended) The reproduction system according to Claim 1,

wherein the speech recognition unit accepts a subsequent speech after the reproducing unit starts reproducing the given one, and

wherein the control unit retrieves a certain subgroup of pieces of information based on the inputted subsequent speech, wherein the certain subgroup of pieces of information is a

Serial No. 10/694,407

Attorney Docket No. 01-495

subset of the given group, designates a certain one of the certain subgroup, and controls the reproduction unit for stopping reproducing the given one and then instantaneously starting reproducing the certain one instead of the given one.

3. (Original) The reproduction system according to Claim 1,

wherein, when the control unit designates the given one from the given group of pieces of information, the given one is designated based on a degree of matching the search word,

wherein the degree of matching the search word is evaluated with a more meticulous criterion than a criterion with which the given group are retrieved so that at least the given one can be designated from the given group.

4. (Original) The reproduction system according to Claim 1,

wherein, when the control unit designates the given one from the given group of pieces of information, the given one is randomly designated from the given group.

5. (Original) The reproduction system according to Claim 1,

wherein, when the control unit designates the given one from the given group of pieces of information, the given one is designated from the given group based on a frequency the given one was reproduced.

6. (Original) The reproduction system according to Claim 1,

wherein the storing unit additionally stores a date and an hour when each of the plurality of pieces of information is stored, and

Serial No. 10/694,407

Attorney Docket No. 01-495

wherein, when the control unit designates the given one from the given group of pieces of information, the given one is designated from the given group based on the stored dates and hours.

7. (Currently amended) The reproduction system according to Claim 1,
wherein the storing unit additionally stores sale dates of the plurality of pieces of information, and

wherein, when the control unit designates the given one ~~of~~ from the given group of pieces of information, the given one is designated from the given group based on the stored sale dates.

8. (Original) The reproduction system according to Claim 1,
wherein, when one of the recognized words indicates an operational command for operating the reproduction system, the control unit executes the operational command, and
wherein, when all the recognized words do not indicate the operational command, the control unit recognizes all the recognized words as candidates from which the search word is designated.

9. (Original) The reproduction system according to Claim 8,
wherein the operational command includes a listing command for listing up a list for reproducing and a reproducing command for reproducing based on the list,
wherein, when the indicated operational command is the listing command and a piece of information is being reproduced, the control unit registers in the list the piece of information that is being reproduced, and

Serial No. 10/694,407

Attorney Docket No. 01-495

wherein, when the indicated operational command is the reproducing command, the control unit reproduces a piece of information in the list based on the list.

10. (Currently amended) The reproduction system according to Claim 1,

~~wherein, when~~wherein the speech ~~recognizing~~recognition unit ~~has~~is further configured to:

(i) output a plurality of candidates for the recognition result,

(ii) designate one of the recognized words, ~~the speech recognizing unit~~
~~designates a given group of word candidates from the plurality of candidates, and~~

(iii) send the designated given group of word candidates to the control unit, and

~~wherein the given group of candidates is a subset of the plurality of candidates,~~

wherein, if the given group of word candidates received from the speech
recognition unit correspond to a given plurality of search word candidates, the control unit
designates ~~at the~~ plurality of search word candidates, and then, from the given group of candidates
~~received from the speech recognition unit, and wherein the control unit retrieves a certain group~~
of pieces of information that corresponds to at least one of the plurality of search word
candidates from the stored pieces of information.

11. (Currently amended) The reproduction system according to Claim 1, further
comprising:

a combination information storing unit for storing a plurality of pieces of
combination information relating to a combination among words,

wherein the speech recognition unit is further configured to output a recognition
result candidate having likelihood data indicating a degree of likelihood, and

Serial No. 10/694,407

Attorney Docket No. 01-495

wherein, when the combination among the ~~recognized~~ words included in the recognition result candidate is not included in the combination information storing unit, the speech ~~recognizing-recognition~~ unit executes one of (i) never sending ~~the recognized words~~ to the control unit the recognition result candidate as the recognition result, and (ii) sending to the control unit the recognition result candidate as the ~~recognized words~~ recognition result along with information indicating that the degree of likelihood of the ~~recognized words~~ to the inputted speech is low~~decreased~~.

12. (Original) The reproduction system according to Claim 1, wherein each of the plurality of pieces of information stored in the storing unit includes information of a musical composition.

13. (Original) The reproduction system according to Claim 1,
wherein the reproduction system is provided in a vehicle.

14. (Currently amended) A computer program product that includes a computer usable medium and is used in a reproduction system that includes:

a storing unit for storing a plurality of pieces of information that can be reproduced;

a reproducing unit for reproducing a piece of information designated from the plurality of pieces of information stored in the storing unit; and

a speech inputting unit for ~~inputting-receiving~~ a speech inputted by a user,

the computer program product comprising at least one of instruction groups:

a first instruction group for recognizing and decomposing the inputted speech into

words; and

Serial No. 10/694,407

Attorney Docket No. 01-495

a second instruction group for designating a search word from the recognized words, retrieving a piece of information that corresponds to the search word from the stored pieces of information, and controlling the reproducing unit for reproducing the retrieved piece of information,

wherein, when a given group of pieces of information that corresponds to the search word is retrieved, wherein the given group of pieces of information is a subset of the plurality of pieces of information, a given one from the given group of pieces of information is designated without receiving any input from the user for designating one of the given group of pieces of information. and the reproducing unit is thereby instantaneously controlled for reproducing the given one ~~of~~ designated from the given group.

15. (Currently amended) A reproducing method used in a reproduction system that includes:

a storing unit for storing a plurality of pieces of information that can be reproduced;

a reproducing unit for reproducing a piece of information designated from the plurality of pieces of information stored in the storing unit; and

a speech inputting unit for ~~inputting~~ receiving a speech inputted by a user,

the reproducing method comprising:

recognizing and decomposing the inputted speech into words;

designating a search word from the recognized words;

retrieving a piece of information that corresponds to the search word from the stored pieces of information; and

controlling the reproducing unit for reproducing the retrieved piece of information,

wherein, when a given group of pieces of information that corresponds to the search

Serial No. 10/694,407

Attorney Docket No. 01-495

word is retrieved, wherein the given group of pieces of information is a subset of the plurality of pieces of information, a given one from the given group of pieces of information is designated without receiving any input from the user for designating one of the given group of pieces of information, and the reproducing unit is thereby instantaneously controlled for reproducing the given one ~~of~~ designated from the given group.

16. (Currently amended) A reproduction system comprising:

a storing unit ~~for~~ storing a plurality of pieces of information that can be reproduced;

a reproducing unit ~~for reproducing~~ configured to reproduce a piece of information designated from the plurality of pieces of information stored in the storing unit;

a speech ~~recognizing~~ recognition unit ~~for inputting~~ configured to receive a speech inputted by a user and ~~for recognizing and decomposing the inputted speech into words to~~ thereby recognize the words as a recognition result;

a control unit for designating a search word from the recognized words sent by the speech ~~recognizing~~ recognition unit, retrieving a piece of information that corresponds to the search word from the stored pieces of information, and controlling the reproducing unit for reproducing the retrieved piece of information; and

a combination information storing unit for storing a plurality of pieces of combination information relating to a combination among the words,

wherein the speech recognition unit is further configured to output a recognition result candidate having a likelihood data indicating a degree of likelihood, and

wherein, when the combination among the recognized words included in the recognition result candidate is not included in the combination information storing unit, the speech ~~recognizing~~ recognition unit executes one of (i) never sending the recognized words to

Serial No. 10/694,407

Attorney Docket No. 01-495

the control unit the recognition result candidate as the recognition result, and (ii) sending to the control unit the recognized words along with information indicating that a the recognition result candidate as the recognition result with the degree of likelihood of the recognized words to the inputted speech is low decreased.

17. (Currently amended) The reproduction system according to ~~Claim 15~~Claim 16, wherein the reproduction system is provided in a vehicle.

18. (Currently amended) A computer program product that includes a computer usable medium and is used in a reproduction system that includes:

a storing unit for storing a plurality of pieces of information that can be reproduced;

a combination information storing unit for storing a plurality of pieces of combination information relating to a combination of among words;

a reproducing unit for reproducing a piece of information designated from the plurality of pieces of information stored in the storing unit; and

a speech inputting unit for ~~inputting~~ receiving a speech inputted by a user,

the computer program product comprising at least one of instruction groups:

a first instruction group for ~~recognizing and~~

decomposing the inputted speech into words to thereby output a recognition result candidate having likelihood data indicating a degree of likelihood, and

determining a determination as to whether or not the combination among the recognized words included in the recognition result candidate is included in the combination information storing unit,

~~wherein recognizing, when the combination among the recognized words is included~~

Serial No. 10/694,407

Attorney Docket No. 01-495

~~in the combination information storing unit, the recognized words are recognized~~determination is affirmed, the words included in the recognition result candidate as final recognized words,

~~wherein~~dealing, when the combination among the recognized words is not included in the combination information storing unit, the recognized words are dealt withdetermination is negated, with the words included in the recognition result candidate by one of two procedures, wherein in a first procedure the ~~recognized words~~ included in the recognition result candidate become tentative recognized words ~~having information indicating that a~~with the degree of likelihood of the recognized words to the inputted speech is lowdecreased, wherein in a second procedure the ~~recognized words~~ included in the recognition result candidate do not become the final recognized words; and

a second instruction group for

___designating, when the final recognized words are present, a search word from the final recognized words,

___retrieving a piece of information that corresponds to the search word from the stored pieces of information, and

___controlling the reproducing unit for reproducing the retrieved piece of information.

19. (Currently amended) A reproducing method used in a reproduction system that includes:

a storing unit for storing a plurality of pieces of information that can be reproduced;

a combination information storing unit for storing a plurality of pieces of combination information relating to a combination among words;

a reproducing unit for reproducing a piece of information designated from the

Serial No. 10/694,407

Attorney Docket No. 01-495

plurality of pieces of information stored in the storing unit; and

a speech inputting unit for ~~inputting~~ receiving a speech inputted by a user,

the reproducing method comprising steps of:

~~recognizing and decomposing the inputted speech into words to thereby output a~~
recognition result candidate having likelihood data indicating a degree of likelihood;

determining a determination as to whether or not the combination among the
~~recognized words included in the recognition result candidate~~ is included in the combination
information storing unit,

~~wherein recognizing, when the combination among the recognized~~ determination is
affirmed, the words is included in the combination information storing unit, the recognized
~~words are recognized~~ recognition result candidate as final recognized words,

~~wherein dealing, when the combination among the recognized words is not included~~
~~in the combination information storing unit~~ determination is negated, with the recognized words
~~are dealt with~~ included in the recognition result candidate by one of two procedures, wherein in a
first procedure the ~~recognized words included in the recognition result candidate~~ become
tentative recognized words ~~having information indicating that a degree of likelihood of the~~
~~recognized words to the inputted speech is low~~ with the degree of likelihood decreased, wherein
in a second procedure the ~~recognized words included in the recognition result candidate~~ do not
become the final recognized words;

designating, when the final recognized words are present, a search word from the
final recognized words;

retrieving a piece of information that corresponds to the search word from the
stored pieces of information; and

controlling the reproducing unit for reproducing the retrieved piece of information.

Serial No. 10/694,407

Attorney Docket No. 01-495

20. (New) A reproduction system comprising:

a storing unit for storing a plurality of pieces of information that can be reproduced;

a reproducing unit for reproducing a piece of information designated from the plurality of pieces of information stored in the storing unit;

a speech recognition unit for receiving a speech, which is inputted by a user, and for decomposing the inputted speech into words to thereby recognize words as a recognition result; and

a word designation unit configured to designate a search word from the recognized words sent by the speech recognition unit;

a retrieval unit configured to retrieve a piece of information that corresponds to the search word from the stored pieces of information; and

a command unit configured, when the control unit retrieves a given group of pieces of information corresponding to the search word, wherein the given group of pieces of information is a subset of the plurality of pieces of information, to designate a given one from the given group of pieces of information without receiving any input from the user for designating one of the given group of pieces of information, to thereby instantaneously cause the reproducing unit to reproduce the given one designated from the given group.

21. (New) The reproduction system according to claim 20,

wherein the speech recognition unit accepts a subsequent speech after the reproducing unit starts reproducing the given one,

Serial No. 10/694,407

Attorney Docket No. 01-495

wherein the retrieval unit retrieves a certain subgroup of pieces of information based on the inputted subsequent speech, wherein the certain subgroup of pieces of information is a subset of the given group and designates a certain one of the certain subgroup, and

wherein the command unit causes the reproducing unit to stop reproducing the given one and then instantaneously start reproducing the certain one instead of the given one.

22. (New) The reproduction system according to claim 20,

wherein, when the retrieval unit designates the given one from the given group of pieces of information, the given one is designated based on a degree of matching the search word,

wherein the degree of matching the search word is evaluated with a more meticulous criterion than a criterion with which the given group are retrieved so that at least the given one can be designated from the given group.

23. (New) The reproduction system according to claim 20,

wherein, when the control unit designates the given one from the given group of pieces of information, the given one is randomly designated from the given group.

24. (New) The reproduction system according to claim 20,

wherein, when the retrieval unit designates the given one from the given group of pieces of information, the given one is designated from the given group based on a frequency the given one was reproduced.

25. (New) The reproduction system according to claim 20,

wherein the storing unit additionally stores a date and an hour when each of the plurality of pieces of information is stored, and

Serial No. 10/694,407

Attorney Docket No. 01-495

wherein, when the retrieval unit designates the given one from the given group of pieces of information, the given one is designated from the given group based on the stored dates and hours.

26. (New) The reproduction system according to claim 20,

wherein the storing unit additionally stores sale dates of the plurality of pieces of information, and

wherein, when the retrieval unit designates the given one from the given group of pieces of information, the given one is designated from the given group based on the stored sale dates.

27. (New) The reproduction system according to claim 20,

wherein, when one of the recognized words indicates an operational command for operating the reproduction system, the command unit executes the operational command, and

wherein, when all the recognized words do not indicate the operational command, the command unit recognizes all the recognized words as candidates from which the search word is designated.

28. (New) The reproduction system according to claim 27,

wherein the operational command includes a listing command for listing up a list for reproducing and a reproducing command for reproducing based on the list,

wherein, when the indicated operational command is the listing command and a piece of information is being reproduced, the command unit registers in the list the piece of information that is being reproduced, and

wherein, when the indicated operational command is the reproducing command, the command unit reproduces a piece of information in the list based on the list.

Serial No. 10/694,407

Attorney Docket No. 01-495

29. (New) The reproduction system according to claim 20,

wherein the speech recognition unit is further configured to

(i) output a plurality of candidates for the recognition result,

(ii) designate a given group of word candidates from the plurality of candidates,

and

(iii) send the designated given group of word candidates to the word designation unit, and

wherein, if the received given group of word candidates correspond to a plurality of search word candidates, the word designation unit designates the plurality of search word candidates, and

wherein the retrieval unit retrieves a certain group of pieces of information that corresponds to at least one of the plurality of search word candidates from the stored pieces of information.

30. (New) The reproduction system according to claim 20, further comprising:

a combination information storing unit for storing a plurality of pieces of combination information relating to a combination among words,

wherein the speech recognition unit is further configured to output a recognition result candidate having likelihood data indicating a degree of likelihood, and

wherein, when the combination among words included in the recognition result candidate is not included in the combination information storing unit, the speech recognition unit executes one of (i) never sending to the word designation unit the recognition result candidate as the

Serial No. 10/694,407

Attorney Docket No. 01-495

recognition result, and (ii) sending to the word designation unit the recognition result candidate as the recognition result with the degree of likelihood decreased.

31. (New) The reproduction system according to claim 20, wherein each of the plurality of pieces of information stored in the storing unit includes information of a musical composition.

32. (New) The reproduction system according to claim 20,
wherein the reproduction system is provided in a vehicle.

33. (New) A reproduction system comprising:

a storing unit storing a plurality of pieces of information that can be reproduced;

a reproducing unit configured to reproduce a piece of information designated from the plurality of pieces of information stored in the storing unit;

a speech recognition unit configured to receive a speech inputted by a user and for decomposing the inputted speech into words to thereby recognize the words as a recognition result;

a word designation unit for designating a search word from the recognized words sent by the speech recognition unit;

a retrieval unit configured to retrieve a piece of information that corresponds to the search word from the stored pieces of information;

a command unit configured to cause the reproducing unit to reproduce the retrieved piece of information; and

a combination information storing unit for storing a plurality of pieces of combination information relating to a combination among words,

Serial No. 10/694,407

Attorney Docket No. 01-495

wherein the speech recognition unit is further configured to output a recognition result candidate, and

wherein, when the combination among words included in the recognition result candidate is not included in the combination information storing unit, the speech recognition unit determines, without receiving any command from the user, not sending the recognition result candidate as the recognition result to the word designation unit.